

WHAT IS CLAIMED IS:

- 1) An adjustable shroud for use in a melt spinning process having a spinneret, comprising: an adjustable shroud, said shroud having means to secure it in close proximity to a spinneret, and means to adjust the length of the shroud.
- 2) The adjustable shroud of claim 1, wherein said adjustable shroud is quadrilateral, oval or circular in cross-section.
- 3) The adjustable shroud of claim 2, wherein two fixed walls form said quadrilateral shroud with two folding walls.
- 4) The adjustable shroud of claim 1, wherein said shroud is in the form of a bellows or of nesting walls.
- 5) The adjustable shroud of claim 1, wherein said means to adjust the length of said shroud is pneumatic, hydraulic, or one or more mechanical worm screws.
- 6) The adjustable shroud of claim 1, wherein said shroud contains heating means.
- 7) The combination of an adjustable shroud and a spinneret, comprising a spinneret for producing synthetic fibers; an adjustable shroud having means to secure it in close proximity to said spinneret, and means to adjust the length of the shroud; said shroud containing heating means.
- 8) The combination of claim 7, wherein said adjustable shroud is quadrilateral, oval or circular in cross-section.
- 9) The combination of claim 8, wherein two fixed walls form said quadrilateral shroud with two folding walls.

- 10) The combination of claim 7, wherein said shroud is in the form of a bellows or of nesting walls.
- 11) The combination of claim 7, wherein said means to adjust the length of said shroud is pneumatic, hydraulic, or one or more mechanical worm screws.
- 12) A melt spinning process for making synthetic fiber, comprising: a) determining the optimum cooling and draw down ratio of said fibers; b) adjusting the shroud length to obtain the optimum cooling and draw down ratio; c) spinning fibers from a polymer melt; and d) passing said spun fibers through said shroud.
- 13) The melt spinning process of claim 12, wherein said adjustable shroud is quadrilateral, oval or circular in cross-section.
- 14) The melt spinning process of claim 13, wherein two fixed walls form said quadrilateral shroud with two folding walls.
- 15) The melt spinning process of claim 12, wherein said shroud is in the form of a bellows or of nesting walls.
- 16) The melt spinning process of claim 12, wherein adjusting said length of said shroud is accomplished by pneumatic, hydraulic, or one or more mechanical worm screws.
- 17) The melt spinning process of claim 12, further including the step of heating said spun fibers as they pass through said shroud.